

WHAT IS CLAIMED IS:

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1. A viscoelastic preparation comprising greater than 1 percent by weight of a glycated chitosan polymer dispersed in an aqueous solution, said glycated chitosan polymer having a molecular weight of greater than 100,000 Daltons, said aqueous solution having a viscosity greater than 10,000 centistokes measured at 25° and a pH in the range of 5.5 to 7.5.
 2. The viscoelastic preparation according to claim 1 wherein said aqueous solution possesses a pH between 6.3 and 7.
 3. The viscoelastic preparation according to claim 1 wherein said aqueous solution comprises a buffered physiological saline solution of said glycated chitosan.
 4. The viscoelastic preparation according to claim 1 wherein said glycated chitosan polymer possesses between 30-90% glycation of its otherwise free amino groups.
 5. The viscoelastic preparation according to claim 4 wherein said glycated chitosan polymer possesses about 60% glycation of its otherwise free amino groups.
 6. The viscoelastic preparation according to claim 1 wherein said glycated chitosan polymer has a molecular weight between 100,000 and 2,000,000 Daltons.

The viscoelastic preparation according to claim 1 comprising about nine percent by weight of said glycated chitosan polymer dispersed in said aqueous solution, wherein said glycated chitosan polymer possesses about 60% glycation of its otherwise free amino groups, and said aqueous solution having a viscosity of about 77,000 centistokes.

8. The viscoelastic preparation according to claim 1 additionally containing one or more different viscoelastic materials miscible in said aqueous solution.

9. The viscoelastic preparation according to claim 8 wherein said different viscoelastic material is selected from the group consisting of hyaluronic acid, chondroitin sulfate and carboxymethylcellulose.

10. The viscoelastic preparation according to claim 1 wherein said glycated chitosan polymer comprises a monosaccharide bonded to said otherwise free amino groups.

11. The viscoelastic preparation according to claim 11 wherein said monosaccharide comprises galactose.

12. The viscoelastic preparation according to claim 1 wherein said glycated chitosan polymer is in the form of a Schiff base, an Amadori product or mixtures thereof.

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13. The viscoelastic preparation according to claim 1 wherein said glycated chitosan polymer is in the form of a reduced Schiff base, a reduced Amadori product or mixtures thereof.

14. The viscoelastic preparation according to claim 1 wherein said glycated chitosan polymer possesses a number of chemically modified monosaccharide or oligosaccharide substituents.

15. An eye drop preparation comprising less than 1 percent by weight of a glycated chitosan polymer dispersed in an aqueous solution, said aqueous solution having a viscosity of between 10-100 centistokes measured at 25°.

16. A dried film comprising glycated chitosan.

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A₂

add
B₁